



# UNITED STATES PATENT AND TRADEMARK OFFICE

se

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,849	07/16/2001	Tadashi Yamamoto	2001_1002A	2804

513 7590 05/25/2005

WENDEROTH, LIND & PONACK, L.L.P.  
2033 K STREET N. W.  
SUITE 800  
WASHINGTON, DC 20006-1021

EXAMINER
----------

LUU, CUONG V

ART UNIT	PAPER NUMBER
----------	--------------

2128

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/904,849

Applicant(s)

YAMAMOTO, TADASHI

Examiner

Cuong V. Luu

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### ***Specification***

1. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.
  - 1.1. The word "inputted" was used at numerous places in the specification, for example, on page 4, lines 18 and 22. It is suggested that they be replaced by "input".
  - 1.2. The phrase "inputted by the terminal device(s)" was used at numerous places in the specification, for example, on page 4, lines 18 and 22. The terminal itself cannot input information or data. Therefore, it is suggested that they be corrected as "input at the terminal device(s)" or "input by a user".
  - 1.3. The clause "road design can be executed easily by terminals" was written on page 23, line 28 and page 24, line 1. Terminals cannot execute a design. Only users can execute a design at terminals, so it is suggested to be changed to "road design can be executed easily at terminals".
2. There is an apparent typographical error of FIB. on page 21, lines 12 and 14. Correction is required. See MPEP paragraph 608.01(b).

### ***Drawings***

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: Appropriate correction is required.

4. The claims are generally narrative and indefinite, failing to conform to current U.S. practice.

They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

- 4.1. Claim 1 is objected due to usage of the phrase "which executes road design by a terminal" on page 25, lines 1-2, 10 and 16. The terminal itself cannot execute a design. Therefore, it is suggested that it be corrected as "which executes road design by a user at a terminal" and "input at said terminal device" or "input by a user".
- 4.2. Claim 1 is objected due to usage of the phrase "information inputted by said terminal device" on page 25, lines 10 and 16. The terminal itself cannot input information and apparently there is a typographical error of "inputted". Therefore, it is suggested that it be corrected as "input at said terminal device" or "input by a user".
- 4.3. Claim 1 is objected due to usage of the phrase "sending information with said terminal device". The terminal cannot be sent with information via a network. It is suggested that it be corrected as "sending information at said terminal device"

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-9, 11-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over William H. Kemp (U.S. Application 09/796896), and further in view of applicant's admitted prior art.

5. As per claim 1, Kemp teaches a system for designing comprising:

a terminal device, which has a function of a client, for inputting information of design conditions and personal information of a user (page 2, column 1, paragraph 0017, lines 4-8; page 8, column 1, paragraph 0147);

a server for offering a service for designing on the basis of said information of design conditions and said personal information input by said terminal device (page 2, column 1, paragraph 0017, lines 2-4; and paragraph 0018, lines 1-7); and

a computer network for linking said terminal device to said server, wherein said server of designing roads comprises (page 2, column 1, paragraph 0017, lines 1-2),

network processing means, which is connected to said computer network, for receiving said information of design conditions and said personal information input by

said terminal device and for receiving and sending information with said terminal device (page 8, column 1, paragraph 0147, lines 1-4), and

design processing means for executing design on the basis of said information of design conditions and said personal information received by said network processing means and for generating design and calculation documents (page 2, column 1, paragraph 0017, lines 2-4, and paragraph 0018).

Kemp does not particularly teach a system for designing roads. However, he teaches a system comprising of a server, which is also a computer (page 7, column 1, paragraph 0140, lines 1-3), on which a design can be executed based on appropriate application software and input design information.

The applicant's admitted prior teaches designing roads, generating road design maps, and calculation documents on stand-alone computers (p. 1, lines 12-16; p.2, lines 25-28; p.3, lines 1-3).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kemp and applicant's admitted prior art of road designing on the server to perform the road design task on the basis of said information of design conditions and said personal information received by said network processing means and for generating road design maps and calculation documents. It would have provided capability for telecommuting for ease of designing roads at any place and time, and reduced cost and effort for software maintenance and services.

6. As per claim 2, Kemp teaches network-processing means for transmitting design maps and documents generated by said design processing means to said terminal device (page 3, column2, paragraph 0042, lines 10-14).

7. As per claim 3, Kemp teaches network-processing means transmits said design maps and said calculation documents to said terminal device as Web pages (page 7, column2, paragraph 0144, lines 4-10).
8. As per claim 5, Kemp teaches said terminal device transmits said information of design conditions and said personal information of the user by inputting on Web pages provided by said server of designing roads (page 7, column2, paragraph 0144, lines 4-10; page 2, column 1, paragraph 016, lines 4-8).
9. As per claim 6, the admitted prior art teaches road design processing means comprises:  
road design map generating means for generating said road design maps (page 3, lines 1-3); and  
cutting and banking planes calculating means for calculating a mass of cutting and banking planes and an area of a slope finishing mentioned in said calculation documents (page 2, lines 25-28).
10. As per claim 7, Kemp teaches design map generating means of design processing means changes a line on an arbitrary point continuously and automatically in accordance with an instruction to input externally (this is a feature of Design Expert software).

However, he does not teach changing a road centerline.

Applicant's admitted prior art teaches this feature (p. 1, lines 22-24; p. 3, lines 4-6).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kemp and applicant's admitted prior art. The teaching of changing a road centerline on an

arbitrary point continuously and automatically in accordance with an instruction to input externally would have reduced time and effort for user to design roads.

11. As per claim 8, Kemp teaches said design processing means changes a curve on an arbitrary point continuously and automatically in accordance with an instruction to input externally (this is a feature of Design Expert software).

However, he does not teach changing a road vertical curve.

Applicant's admitted prior art teaches this feature (p. 2, lines 8-14; p. 3, lines 4-6).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kemp and applicant's admitted prior art to perform the task of changes a road vertical curve on an arbitrary point continuously and automatically in accordance with an instruction to input externally. It would have reduced time and effort for user to design roads.

12. As per claim 9, Kemp teaches changing a figure of an intelli-shape automatically in accordance with an instruction to input externally (page 4, paragraph 0048, lines 1-4; changing a building block, intelli-shape, is a feature of Design Expert software).

13. As per claim 11, Kemp teaches design processing means uses a three dimensional patch (curve plane) of a standard crossing (this is a feature of Design Expert software).

14. As per claim 12, Kemp teaches a method for designing, which executes design by using a computer network, comprising the steps of:

(A) transmitting screen images for offering information to a terminal device connected to the computer network (page 7, column2, paragraph 0144, lines 4-10);



(B) receiving information of design conditions and personal information of a user input on the screen images for offering information by the terminal device (page 8, column 1, paragraph 0147, lines 1-4);

transmitting designed graphics and the calculation documents generated to the terminal device (page 3, column 2, paragraph 0042, lines 10-14).

Kemp does not teach

(C) designing roads on the basis of the information of design conditions and the personal information received in said step (B) and generating road design maps and calculation documents;

The applicant's admitted prior art, however, teaches these features (p. 1, lines 16-21).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kemp and applicant's admitted prior art of road designing on the server to perform the road-design task on the basis of the information of design conditions and the personal information received in said step (B) and generate road design maps and calculation documents which could be transmitted to the terminal device. It would have provided capability for telecommuting for ease of designing roads at any place and time, and reduced cost and effort for software maintenance and services.

15. As per claim 13, Kemp teaches transmitting the screen images for offering information, the road design maps and the calculation documents to the terminal device as Web pages (page 7, column 2, paragraph 0144, lines 4-10).

16. As per claim 14, these limitations have already been discussed in the rejection of claim 4.

They are, therefore, rejected for the same reason.

17. As per claim 15, these limitations have already been discussed in the rejection of claim 1 and 6. They are, therefore, rejected for the same reasons.

18. As per claim 16, these limitations have already been discussed in the rejection of claim 7. They are, therefore, rejected for the same reason.

19. As per claim 17, these limitations have already been discussed in the rejection of claim 8. They are, therefore, rejected for the same reason.

20. As per claim 18, these limitations have already been discussed in the rejection of claim 9. They are, therefore, rejected for the same reason.

21. As per claim 20, these limitations have already been discussed in the rejection of claim 11. They are, therefore, rejected for the same reason.

22. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over William H. Kemp (U.S. Patent 2001/0047251 A1); and further in view of applicant's admitted prior art and Belanger et al (U.S. Patent 2001/0014839).

The combination of Kemp and the admitted prior art teach said network processing means transmits said road design maps and said calculation documents to said terminal device. However, they do not teach the transmission as E-mails.

Belanger et al teach transmitting documents as E-mails (page 4, paragraph 0032, lines 17019).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kemp, the admitted prior art, and Belanger et al. Belanger et al's teaching of transmitting documents as E-mails would have provided flexibility for users to send and receive documents.

Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over William H. Kemp and further in view of applicant's admitted prior art and Ohashi (U.S. Patent 5390291).

23. As per claim 10, Kemp and the applicant's admitted prior art do not teach showing range of changes of a design.

Ohashi teaches showing range of changes of interpolation between two images (col. 18, lines, 57-58; col. 19, lines 8-12).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kemp, the admitted prior art, and Ohashi to show range of changes of a road centerline, a road vertical curve and a figure of an intelli-shape in accordance with an instruction to input externally. Ohashi's teaching would have provided designers a capability to view proposed changes before making decision, which would have helped save them time.

24. As per claim 19, these limitations have already been discussed in the rejection of claim 10.

They are, therefore, rejected for the same reason.

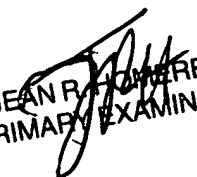
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cuong Luu whose telephone number is 571-272-8572. The examiner can normally be reached on Monday – Friday 8:30 AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached on 571-272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CVL

  
JEAN R. HOMERE  
PRIMARY EXAMINER